

IN THE CLAIMS:

Claims 1 to 51 have been cancelled in prior amendments.

- 5 52. (amended) A payment card for conducting a payment transaction between a customer and a merchant, the payment card comprising:
- 10 a. a substrate;
- b. an alias name printed on the substrate, the alias name being selected by the customer;
- c. a customer-identifier, without customer identity of name and bankcard number, encoded on an encoding medium on the substrate.
- 15 53. The claim as in 52, comprising: the encoding medium is a magnetic strip.
54. The claim as in 52, comprising: the customer- identifier is self-created by the customer.
- 20 55. The claim as in 52, comprising:
the customer-identifier identifies the customer to a payment system, wherein the customer has an account and has pre-stored his/her bankcard data identifying each bankcard with a card specific personal identification number (CPIN).
- 25 56. The claim as in 55, comprising:
the payment system assigns an algorithm, the algorithm being used to encrypt the customer-identifier, the encrypted customer-identifier appended with a reference to the algorithm is encoded on the payment card as an encrypted customer-identifier, and the card is physically delivered to the customer.

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57. The claim as in 55, comprising:
the customer swipes the card at a merchant Point-Of-Sale (POS) terminal, enters the CPIN, to effect a payment to the merchant from a bankcard identified by the CPIN.

5 58. The claim as in 57, comprising:
the POS terminal transfers the customer-identifier, the CPIN, a merchant identifier, and a payment amount to a gateway to a bankcard authorization network (bankcard processor), wherein the bankcard processor interfaces with the payment system using the customer-identifier and the CPIN

10 59. The claim as in 58, comprising:
the payment system uses the customer-identifier to identify customer in the payment system and with the CPIN retrieves specific bankcard data selected by the customer and sends it to the bankcard processor.

15 60. The claim as in 59, comprising:
the bankcard processor processes the payment transaction between the customer and the merchant, and sends payment approval data to the merchant POS terminal.

20 61. (amended) A merchant point-of-sale terminal comprising:
a wireless point-of-sale (POS) terminal, with a card reader mechanism, a key pad, a display screen that has a secure wireless connection to a payment system, with an ability to accept a payment card with a substrate, wherein a customer-identifier,
25 without customer identity of name and bankcard number, is encoded on an encoding medium on the substrate, and wherein the customer-identifier is used to identify the customer to the payment system, wherein the customer has an account and has pre-stored his/her bankcard data identifying each bankcard with a card specific personal identification number (CPIN).

62. The claim as in 61, comprising:

the merchant pre-enters merchant identifier, amount to be paid and makes available to the customer the wireless POS terminal for a payment transaction to the merchant.

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63 The claim as in 61, comprising:

the wireless POS equipped with side shields to provide privacy when entering the CPIN in the keypad.

10 64. The claim as in 61, comprising:

a. the customer enters the payment card in the reader and enters the CPIN;
b. the wireless POS terminal transfers an encrypted payment authorization record with customer-identifier, CPIN, the merchant identifier, and the amount, to the payment system.

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65. The claim as in 64, comprising:

the payment system decrypts the payment authorization record, and with the customer-identifier and the CPIN retrieves specific bankcard data selected by the customer and sends the payment authorization record to a gateway to a bankcard authorization network (bankcard processor).

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66. The claim as in 65, comprising:

the bankcard processor processes the payment transaction between the customer and the merchant, and sends payment approval data to the payment system, the payment system forwards it to the wireless POS terminal.

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67. (amended) A payment system comprising:

a. a server capable of high volume storage and database searches;
b. the server maintains[ing] a plurality of accounts each identified with a customer-identifier and stores[ing] at least one bankcard data of the customer and a customer assigned card specific personal identification number (CPIN);

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c. the system receives the customer-identifier and the CPIN [~~that enabling a specific bankcard to be selected by use of the CPIN at a~~ from a merchant point of sale (POS) for a payment transaction , verifies the customer, retrieves the specific bankcard data identified by the CPIN, and submits a payment transaction record to a prior art card processor network .

68. The claim as in 67, comprising:

a payment card encoded with the customer-identifier, the customer swipes the payment card at a merchant POS, and entering the CPIN to select a specific bankcard for a payment transaction.

69. The claim as in 68, comprising:

a bankcard processor receives payment transaction data from the POS terminal, interfaces with the payment system with the customer-identifier and the CPIN and retrieves the specific bankcard data intended for the payment transaction.

70. The claim as in 69, comprising:

the bankcard processor processes payment transaction and sends payment approval data to the merchant POS terminal.

71. (amended) A payment transaction method between a customer and a merchant equipped with a point of sale (POS) terminal for accepting payments comprising the step of:

swiping a payment card at the POS terminal by a customer with the payment card encoded with a customer-identifier, without customer identity of name and bankcard number, and entering a card specific PIN for selecting a specific bankcard from a plurality of bankcards of the customer for this payment transaction.

72. The claim as in 71, comprising the step of:

receiving payment transaction data from the POS terminal by a bankcard processor, interfacing with a payment system with the customer-identifier and the CPIN
5 and retrieving the bankcard data intended for the payment transaction.

73. The claim as in 72 comprising the step of:

processing payment transaction by the bankcard processor and sending
10 payment approval data to the merchant POS terminal.

74. (amended) A payment transaction method between a customer and a merchant with a web page point-of-sale enabling a secure connection on a global computer network for accepting payments comprising the steps of:

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a. displaying on the web page fields of, a pre-entered merchant identifier, a pre-entered transaction identifier, a pre entered dollar amount and entry fields of a, name, a card number, and a card expire date;

b. entering of an alias name for name, a customer-identifier, without
20 customer identity of name and bankcard number, for the card number, and for an expiration date [enters] a card specific PIN to select a specific bankcard from a plurality of bankcards of the customer for this payment transaction; and web page sends the payment data to a payment system that pre-stores the customer identifier and plurality of bankcards each identified by a card specific PIN [a bankcard processor].

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75. The claim as in 74, comprising the step of:

receiving payment transaction data from the web page POS by the bankcard processor, interfacing with a payment system with the customer-identifier and the CPIN
30 and retrieving the specific bankcard data intended for the payment transaction.

76. The claim as in 75 comprising the step of:
processing payment transaction by the bankcard processor and sending
payment approval data to the merchant and the customer via the global computer
network.

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77. (amended) A method of selecting any one of a plurality of bankcards of a
customer at a merchant point of sale for a payment to a merchant comprising the steps
of:

- a. entering of a customer identifier , without customer identity of name and
10 bankcard number, and a bankcard specific personal identification number (CPIN) in the
point of sale interface;
- b. sending the identifier and the CPIN to a card processor;
- c. interfacing by the card processor with a payment system, wherein the
customer having a plurality of pre-stored customer bankcard data, each bankcard
15 identified with the CPIN;
- d. returning to the card processor the bankcard data corresponding to the
customer identifier and the CPIN from the payment system.

78. The Claim as in 77, having further step of:
20 identifying a particular bankcard of the customer and verifying the customer by
the CPIN.

79. The claim as in 77, having further step of:
processing the payment transaction with the bankcard data by the card
25 processor.

80. The claim as in 78, having further steps of:
a. having access to the payment system by the customer;
b. entering the bankcard data and self-selecting a CPIN for each bankcard of
30 the customer.

Claims 81 to 83 have been cancelled in this amendment.

84. (newly added) A system of bankcard data storage in a computer system comprising:

- a. a transformation logic that breaks an original bankcard number into parts of, (i) bank code, (ii) 4 digit portions of the card number and (iii) card expiration date;
- b. the transformation logic maintains a plurality of offset table for each of these parts of the bankcard number and applies the offsets to each part of the original bankcard number with the corresponding offset from the tables and saves the transformed bankcard number in a data storage, wherein the transformed bankcard number is indistinguishable from the original bankcard number in format;
- c. the transformation logic reads the transformed bankcard number from the data storage and removes the offset and gets the original bankcard number.

85. (newly added) The claim as in 84, further comprising:

- a. the transformation logic uses a sequence number to identify each bankcard number in the data storage;
- b. the offsets that are applied to the original bankcard number are dependent upon the sequence number.